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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/625,631  | 07/24/2003  | Noriyuki Ito         | 122.1444D           | 8072             |
| 21171   | 7590        | 03/22/2006           | EXAMINER            |                  |
| STAAS & HALSEY LLP<br>SUITE 700<br>1201 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                      | LIN, SUN J          |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2825                |                  |

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/625,631             | ITO ET AL.          |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Sun J. Lin             | 2825                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14, 15 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14, 15 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/811,772.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is in response to applicants' Amendment and Remarks filed on 12/30/2005 regarding application 10/625,631 filed on 07/24/2003. Claims 1 – 13 and Claims 16 – 27 were cancelled without prejudice. Claim 28 is newly added. Claims 14, 15 and 28 remain pending in the application.

### *Claim Objections*

2. Claims listed below are objected to because of the following informalities:

Claim 14, line 1 – 2, change “the steps” to ~~—steps—~~.

Claim 15, line 1 – 2, change “the steps” to ~~—steps—~~.

Claim 15, line 7, after “serious” delete ~~—of—~~.

Claim 15, line 11, change “en error” to ~~—an error—~~.

Appropriate corrections are required.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 14, 15 and 28 are rejected under 35 U.S.C. 102(b) as being unpatentable over U.S. Patent No. 5,050,091 to Rubin.

5. As to Claim 14, Rubin shows and discloses the following subject matter:

- A method of controlling (i.e., processing) connectivity (i.e., wiring) and (polygon) placement of electrical circuits while modifying the design of such circuits – [col. 1, line 17 – 21; col. 2, line 1 – 21];
- Computer program (e.g., placement and wiring processing program) for controlling the operation of a sequence of synthesis tools – [col. 6, line 40 – 48];

Art Unit: 2825

- Reading out a placement and wiring processing program from a mass storage unit 604 (i.e., program storage unit) – [Fig. 6];
- Copying said read out placement and wiring processing program on from the mass storage unit 604 (program storage unit) to main memory 606 (i.e., hard drive or RAM – a storage unit) to be retrieved by a central processor 607 of a computer – [Fig. 6]; establishing an interactive graphic design system (i.e., standard hardware design environment) by using a graphic editor and display monitor 601 – [Fig. 6; col. 1, line 49 – col. 2, line 43]; analysis and synthesis tool in an environment of circuit layout – [abstract]; Notice that the graphic design system is an industrially well-known standard hardware design environment, which executes a program for operating and processing the placement and wiring to design a layout of piece of an integrated circuit;
- Executing placement and wiring processing by a control system 612 based on said placement and wiring processing program stored in the main memory 606 (hard drive or RAM – a storage unit);
- A programmable logic array (PLA) generator include a program (i.e., placement and wiring program) for use in generating programmable logic arrays...the PLA generator provides commands to layout a programmable logic array to implement a desired function – [col. 8, line 24 – 32]; Notice that (1) to change a function of PLA, the commands in the program (placement and wiring program) needs to be modified (2) program storage unit (mass storage 604) and storage (main memory 606) are isolated and functioning independently (3) in order not to interrupt execution of placement and wiring processing in each of the synthesis tools in the system, the modification is performed on the program stored in the program storage unit (mass storage 604).

For reference purposes, the explanations given above in response to Claim 14 are called [Reference A] hereinafter.

6. As to Claim 15, Rubin shows and discloses the following subject matter:

- A method of controlling (i.e., processing) connectivity (i.e., wiring) and (polygon) placement of electrical circuits while modifying the design of such circuits – [col. 1, line 17 – 21; col. 2, line 1 – 21];

Art Unit: 2825

- Computer program (e.g., placement and wiring processing program) for controlling the operation of a sequence of synthesis tools – [col. 6, line 40 – 48];
- Reading out a placement and wiring processing program from a mass storage unit 604 (i.e., program storage unit) – [Fig. 6];
- Copying said read out placement and wiring processing program on from the mass storage unit 604 (program storage unit) to main memory 606 (i.e., hard drive or RAM – a storage unit) to be retrieved by a central processor 607 of a computer – [Fig. 6]; establishing an interactive graphic design system (i.e., standard hardware design environment) by using a graphic editor and display monitor 601 – [Fig. 6; col. 1, line 49 – col. 2, line 43]; analysis and synthesis tool in an environment of circuit layout – [abstract]; Notice that the graphic design system is an industrially well-known standard hardware design environment, which executes a program for operating and processing the placement and wiring to design a layout of piece of an integrated circuit;
- Storing execution history information associated with every placement and wiring processing executed by a program (i.e., placement and wiring processing program) in a database 615 – [Fig. 6; col. 4, line 18 – 20, line 39 – 41]; database change means 615 for updating database 615 – [Fig. 6; col. 6, line 26 – 30]; Notice that execution history information is stored in database 615;
- Design rule checker – Checking placement and wiring processing operated through said placement and wiring processing program based on (execution history) information stored in the database 615 – [Fig. 6; col. 6, line 6, line 29 – 30];
- Display system 150 for display error messages (i.e., error information) detected by design rule checker – [col. 11, line 1 – 11; col. 12, line 16 – 18; col. 9, line 25 – 42].

7. As to Claim 28, reasons are included in [Reference A] given above.

### ***Response to Amendment and Remarks***

8. Applicants' amendments and remarks filed on 12/30/2005 have been reviewed.

To overcome the prior art cited by the Examiner, applicants have amended Claim 14

Art Unit: 2825

and 15 to include additional limitations. Applicants' arguments have been fully considered but they are not persuasive. Claim 28 is newly added. Detailed responses to those claims are provided as above.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Sun James Lin* whose telephone number is (571) 272 - 1899. The examiner can normally be reached on Monday-Friday (9:00AM-6:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Chiang* can be reached on (571) 272 - 7483. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 - 7382 for regular communications and (703) 305 - 3413 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 1782.

Sun James Lin  
Primary Examiner  
Art Unit 2825  
March 16, 2006

